

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

Claims 1-6,15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over WHITE et al 4119535 in view of PATTERSON-3412021.

WHITE discloses superiority of DBDMH in methods of achieving sufficient free chlorine levels to treat biofilm in water (summary). Also useful are other dibromo methyl hydantoins(col. 7, bottom). Although comparison with BCDMH is not done, Br is shown as more stable & long lasting than Cl compounds (col. 4, lines 21-27). Thus, one desiring to achieve optimal sufficient free chlorine levels to disinfect pool water would find it obvious that DBDMH would be a superior form over a cl, or BrCl granule of hydantoin, BCDMH included.

The use of granules for water treatment is discussed by Patterson for continual treatment(col. 2, lines 52-68). TABLE 1 teaches the solubility of the DBDMH as < BCDMH, thus able to provide a longer duration of action yet at the same or higher efficacy. Dissolution rate is shown to be a function of surface area/weight, hardness, & the specific formulation. Thus, one in the art, wishing to decrease the rate of dissolution of an effective disinfecting DBDMH granule, would apply sufficient pressure & sizing to meet the desired levels of effectiveness, over the desired period of time.

Such testing as required to optimize hardness & size while maintaining the required effective free Cl levels is within the skill of the artisan to perform with expectation of success (see 2007 supreme court decision in KSR V TELEFLEX @ 82 USPQ 2d @ 1385). One would expect to compare equivalent materials & amounts in order to have statistically & biologically meaningful conclusions. Thus , the unstated basis for comparison would be equimolar, or, if of equal weight, would have been approximately the same , given the difference of one atom of Cl –replaced with Br being only slightly different.

Paterson teaches such preparations can be prepared with or without binders (col. 7, lines 23-25). Although exemplified particles were 3/8 inch or more, it is clear that the granules can be smaller, with greater surface area/weight, if increased duration of effectiveness is desired. The granules used provided > 0.4 ppm active halogen (col. 11, top).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made desiring to utilize water disinfectant granules, would have used the DBDMH modified as desired to increase stability, dispersibility, compatibility of ingredients, processing ease, & reduced toxicity to handlers.

All the critical elements of the instant are disclosed. The amounts and proportions of each ingredient are result effective parameters chosen to obtain the desired effects. It would be obvious to vary the form of each ingredient to optimize the effect desired, depending upon the desired duration of effect, dissolution rate as taught controllable by Patterson by adjusting the hardness & size of the DBDMH granule.

Applicant's arguments filed 6/27/08 have been fully considered but they are not persuasive. Although applicant's arguments that the claims are not anticipated by Howarth is correct, Arguments are not seen as overcoming the 103 rejection, to the extent that the critical feature to distinguish from prior art compacted DBDMH granules, with or without binders, relate to the density, when comparing to BCDMH as claimed. Thus, the at least 15 #/sq. inch crush strength is seen as neither anticipated or obvious over the prior art, if added to claim 1.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NEIL LEVY whose telephone number is 571-272-0619. The examiner can normally be reached on Tuesday-Friday, 7 AM to 5:30 PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL WOODWARD can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NEIL LEVY/
Primary Examiner, Art Unit 1615
